

REMARKS/ARGUMENTS

Claims 1, 3, 5, 10, 11, 13, 17, 19, 21, 23, 28, 29, 31, 35, 38, 39, 41, 42, 47, 50, 56, and 57 have been amended. In addition, claims 2, 4, 12, 20, 22, 30, 32, 45, and 46, and 55 have been canceled without prejudice, and claims 58-65 have been newly added. Claims 1, 3, 5-11, 13-19, 21, 23-29, 31, 33-44, 47-54, and 56-65 are now pending in the application. Applicants respectfully request reexamination and reconsideration of the application.

Claim 42 has been objected to. Applicants have amended claim 42 to address the Examiner's concerns and believe that the objection has been overcome.

Claims 1-7, 19-25, 37-39, 42, 45-50, and 55-57 have been rejected under 35 USC § 102 as anticipated by US Patent No. 6,232,669 to Khoury et al. ("Khoury"), and claims 8-18, 26-36, 40, 41, 43, 44, and 51-54 have been rejected under 35 USC § 103 as being obvious in view of Khoury. Applicants respectfully traverse these rejections.

Independent claim 1 is directed to a probe card assembly that includes a substrate configured to contact a semiconductor tester apparatus and a plurality of probes configured to contact a semiconductor device under test. The probe card assembly also includes a daughter card on which is disposed at least a portion of an electric circuit. The electric circuit "receives as input test data received at said probe card assembly from one of said tester apparatus or said semiconductor device under test, enhances said test data, and outputs enhanced test data."

In the Office Action, Khoury's probe card 260 is equated with the daughter card of claim 1, and Khoury's interconnect traces 263 are equated with the electric circuit of claim 1. Khoury describes the interconnect traces 263, however, as mere conductive traces. Thus, all that interconnect traces 263 do is pass electric signals between pads 265 and electrodes 262. Interconnect traces 263 thus do not enhance or otherwise modify the test signals passing between pads 265 and electrodes 262. Although the Office Action cites Khoury's Abstract to support the proposition that Khoury's interconnect traces 263 customize test signals, Khoury's Abstract does not state that the interconnect traces 263 customize test signals. In fact, Khoury's Abstract does not even mention the interconnect traces 263. Rather, Khoury's Abstract describes "contact structures" formed of a finger contact and having a silicon base etc., which clearly refers to element 30 in Khoury's figures—not the interconnect traces 263. As Khoury's interconnect traces 263 thus do not enhance test data, Khoury does not anticipate or render obvious independent claim 1.

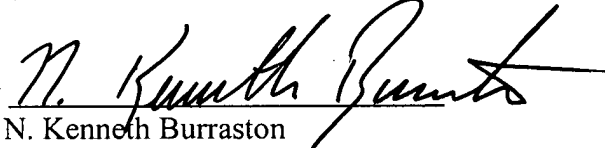
Claims 3, 5-11, 13-18, 58, and 59 depend from independent claim 1 and are therefore also patentable. Moreover, claims 3, 5-11, 13-18, 58, and 59 recite additional features that further distinguish over Khoury. For example, Khoury's interconnect traces 263 are not a digital logic element, a microprocessor, an analog circuit element, a digital-to-analog converter, or an analog-to-digital converter, as required by claims 3 and 11. As another example, Khoury's interconnect traces 263 do not "enhance said test data by receiving test signals from said tester apparatus for testing a first number of semiconductor devices and outputting to said probes test signals for testing a second number of semiconductor devices, wherein said second number is greater than said first number" as required by new claim 58. Therefore, dependent claims 3, 5-11, 13-18, 58, and 59 further distinguish over Khoury.

Like claim 1, independent claims 19, 42, and 50 also recite an electric circuit that enhances test data. As discussed above, Khoury does not teach or suggest an electric circuit that enhances test data. Therefore, independent claims 19, 42, and 50 and their dependent claims also patentably distinguish over Khoury.

In view of the foregoing, Applicants submit that the application is in condition for allowance. If the Examiner believes that a discussion with Applicants' attorney would be helpful, the Examiner is invited to contact the undersigned at (801) 536-6763.

Respectfully submitted,

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